

Intelligent Computer Guided Surgery

PROJECT DESCRIPTION

This project will involve automatic or semi-automatic medical image segmentation to assist in Endovascular Surgery, such as removing Aneurisms from Arteries or Heart Surgery. Following segmentation, we will also look into planning a path for catheters to perform the surgery and automatic control of the catheters using robotic devices. Experiments will be performed on realistic phantoms of arteries.

FACULTY-DEPARTMENT

Science- Computing Science

DESIRED FIELD OF (STUDENT) STUDY

Engineering or Computing Science with some experience in Image Processing and/or Robotics

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

2-3

INTERNSHIP START DATE

July 15

INTERNSHIP END DATE

Oct 15

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.